

IN THE CLAIMS

Please amend claim 1, as shown below. The following listing of claims replaces all prior listings.

1. (Currently amended) A pharmaceutical composition comprising:

(a) a polymer matrix having a targeting peptide covalently bound thereto; and

(b) an effective amount of a bioactive agent substantially homogeneously dispersed throughout said matrix,

wherein the ~~peptide contains between 2 and 100 amino acid residues~~ matrix includes a hydrophobic domain comprising a residue of an amino acid having a hydrophobicity value of at least 1.5 kcal/mol.

2. (Previously presented) A pharmaceutical composition according to claim 1 wherein said polymer comprises repeating alkylene groups, wherein each alkylene group optionally contains from one to three heteroatoms selected from -O-, or -N(R)-, where R is hydrogen or alkyl.

3. (Original) A pharmaceutical composition according to claim 2 wherein said polymer is selected from the group consisting of a polyalkylene oxide, polyalkyleneimine, polyalkylene amine, polyalkene sulfide, polyalkylene sulfonate, polyalkylene sulfone, poly(alkylenesulfonylalkyleneimine) and copolymers thereof.

4. (Original) A pharmaceutical composition according to claim 3 wherein said polymer is selected from the group consisting of a polyethylene glycol, polypropylene glycol, branched polyethylene imine, polyvinyl pyrrolidone, polylactide, poly(lactide-co-glycolide), polysorbate, polyethylene oxide, poly(ethylene oxide-co-propylene oxide), poly(oxyethylated) glycerol, poly(oxyethylated) sorbitol, poly(oxyethylated glucose), polymethyloxazoline, polyethyloxazoline, polyhydroxyethyloxazoline,

polyhydroxypropyloxazoline, polyvinyl alcohol, poly(hydroxyalkylcarboxylic acid), polyhydroxyethyl acrylic acid, polyhydroxypropyl methacrylic acid, polyhydroxyvalerate, polyhydroxybutyrate, polyoxazolidine, polyaspartamide, polysialic acid, linear polypropylene imine, polyethylene sulfide, polypropylene sulfide, polyethylenesulfonate, polypropylenesulfonate, polyethylene sulfone, polyethylenesulfonylethylen- eimine, polycaprolactone, polypropylene oxide, polyvinylmethylether, polyhydroxyethyl acrylate, polyhydroxypropyl methacrylate, polyphosphazene and derivatives, mixtures and copolymers thereof.

5. (Original) A pharmaceutical composition according to claim 4 wherein said polymer is selected from the group consisting of a polyethylene glycol and polypropylene glycol and copolymers thereof.

6. (Original) A pharmaceutical composition according to claim 5 wherein said polymer is polyethylene glycol.

7. (Withdrawn) A pharmaceutical composition according to claim 1 wherein said polymer comprises a polypeptide.

8. (Original) A pharmaceutical composition according to claim 1 wherein said bioactive agent is an anti-cancer agent.

9. (Original) A pharmaceutical composition according to claim 8 wherein said anti-cancer agent is selected from the group consisting of paclitaxel, docetaxel, camptothecin, and derivatives and analogs thereof.

10. (Withdrawn) A pharmaceutical composition according to claim 9 wherein said anti-cancer agent is paclitaxel.

11. (Withdrawn) A pharmaceutical composition according to claim 9 wherein said anti-cancer agent is docetaxel.

12. (Original) A pharmaceutical composition according to claim 9 wherein said anti-cancer agent is camptothecin.

13. (Canceled).

14. (Previously presented) A pharmaceutical composition according to claim 1 wherein the ratio of the solubility of said bioactive agent in said polymer to the solubility of said bioactive agent in water is greater than about 1:1.

15. (Original) A pharmaceutical composition according to claim 14 wherein said ratio is at least about 10:1.

16. (Previously presented) A pharmaceutical composition according to claim 1 wherein said targeting peptide targets cells or receptors associated with diseased tissue.

17-19. (Canceled).

20. (Previously presented) A pharmaceutical composition according to claim 1 wherein said peptide is selected from the group consisting of linear peptides and cyclized peptides.

21. (Withdrawn) A pharmaceutical composition according to claim 19 wherein said peptide targets cells or receptors associated with tissue selected from the group consisting of brain, kidney, lung, skin, pancreas, intestine, uterus, adrenal gland and retina tissue.

22. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with brain tissue.

23. (Withdrawn) A pharmaceutical composition according to claim 22 wherein said peptide comprises a sequence selected from the group consisting of CNSRLHLRC, CENWWGDVC, WRCVLREGPAGGCAWFNRHRL, and CLSSRLDAC.

24. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with kidney tissue.

25. (Withdrawn) A pharmaceutical composition according to claim 24 wherein said peptide comprises a sequence selected from the group consisting of CLPVASC and CGAREMC.

26. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with lung tissue.

27. (Withdrawn) A pharmaceutical composition according to claim 26 wherein said peptide comprises a sequence selected from the group consisting of CGFECVRQCPERC, CGFELETC, CTLRDRNC and CIGEEVC.

28. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with skin tissue.

29. (Withdrawn) A pharmaceutical composition according to claim 28 wherein said peptide comprises the sequence CVALCREACGEGC.

30. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with pancreas tissue.

31. (Withdrawn) A pharmaceutical composition according to claim 30 wherein said peptide comprises the sequence SWCEPGWCR.

32. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with intestinal tissue.

33. (Withdrawn) A pharmaceutical composition according to claim 32 wherein said peptide comprises the sequence YSGKWWG.

34. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with uterine tissue.

35. (Withdrawn) A pharmaceutical composition according to claim 34 wherein said peptide comprises the sequence GLSGGRS.

36. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with adrenal gland tissue.

37. (Withdrawn) A pharmaceutical composition according to claim 36 wherein said peptide comprises the sequence LMLPRAD.

38. (Withdrawn) A pharmaceutical composition according to claim 21 wherein said peptide targets cells or receptors associated with retinal tissue.

39. (Withdrawn) A pharmaceutical composition according to claim 38 wherein said peptide comprises a sequence selected from the group consisting of CRDVVSVIC and CSCFRDVCC.

40. (Previously presented) A pharmaceutical composition according to claim 20 wherein said peptide inhibits integrin-expressing cells from binding to extracellular matrix proteins.

41. (Original) A pharmaceutical composition according to claim 40 wherein said peptide inhibits the binding of fibronectin to $\alpha 5$ - $\beta 1$ integrin.

42. (Original) A pharmaceutical composition according to claim 41 wherein said peptide comprises a sequence selected from the group consisting of CRGDC, CRGDCL, NGR(AHA), DGR(AHA), CRGDCA, RCDVVV, SLIDIP, TIRSVD, KRGD, RRGP and RGD.

43. (Withdrawn) A pharmaceutical composition according to claim 19 wherein said peptide forms RGD-type binding determinants of antibodies.

44. (Withdrawn) A pharmaceutical composition according to claim 43 wherein said peptide is selected from the group consisting of CSFGRGDIRNC, CSFGRTDQRIC, CSFGKGDNRIC, CSFGRNDSRNC, CSFGRVDDRNC, CSFGRADRRNC, CSFGRSVDRNC, CSFGKRDMRNC, CSFGRWDARNC, CSFGRQDVRNC and CSFGRDDGRN

45. (Withdrawn) A pharmaceutical composition according to claim 19 wherein said peptide targets angiogenic endothelium associated with solid tumors.

46. (Withdrawn) A pharmaceutical composition according to claim 45 wherein said peptide comprises a sequence selected from the group consisting of CDCRGDCFC and CNGRCVSGCAGRC.

47. (Withdrawn) A pharmaceutical composition according to claim 19 wherein said peptide targets receptors associated with cancer cells.

48. (Withdrawn) A pharmaceutical composition according to claim 47 wherein said peptide is selected from the group consisting of Abaecins, Andropins, Apidaecins, AS, Bactenecins, Bac, Bactericidins, Bacteriocins, Bombinins, Bombolitins, BPTI, Brevinins, Cecropins, Charybdtoxins, Coleoptericsins, Crabolins, .alpha.-Defensins, .beta.-Defensins, Defensins-insect, Defensins-scorpion, Dermaseptins, Diptericsins, Drosocins, Esculentins, Indolicidins, Lactoferricins, Lantibiotics, Leukocons, Magainins, Mastoparans, Melittins, Phormicins, Polyphemusins, Protegrins, Royalisins, Sarcotoxins, Seminal Plasmins, Tachyplesins, Thionins and Toxins.

49-100. (Canceled).